



भारतीय उष्णदेशीय मौसम विज्ञान संस्थान (आईआईटीएम)

डॉ. होमी भाभा मार्ग, पाषाण, पुणे - 411 008

विज्ञापन सं. कार्मिक/02/2020



INDIAN INSTITUTE OF TROPICAL METEOROLOGY (IITM),

Dr. Homi Bhabha Road, Pashan, Pune-411008

ADVERTISEMENT NO. PER/02/2020

**पूर्णतया लघु अवधि अनुबंध आधार पर कार्यकारी निदेशक, परियोजना वैज्ञानिकों एवं कम्प्यूटर एप्लीकेशन सहयोग वैज्ञानिक की भर्ती**

**RECRUITMENT OF EXECUTIVE DIRECTOR, PROJECT SCIENTISTS & COMPUTER APPLICATION SUPPORT SCIENTIST PURELY ON SHORT TERM CONTRACT BASIS**

भारतीय उष्णदेशीय मौसम विज्ञान संस्थान (आईआईटीएम), पृथ्वी विज्ञान मंत्रालय, नई दिल्ली द्वारा पूर्णतः निधिकृत एक स्वायत्त अनुसंधान संगठन है। यह उष्णकटिबंधीय मौसम विज्ञान पर बल देते हुए वायुमंडलीय विज्ञान, विशेष रूप से जलवायु परिवर्तन और भारतीय मानसून के विभिन्न पहलुओं में अनुसंधान हेतु समर्पित, राष्ट्रीय एवं अंतर्राष्ट्रीय ख्याति प्राप्त यह एक प्रमुख संस्थान है।

आईआईटीएम की विभिन्न परियोजनाओं के अंतर्गत निम्नलिखित पदों की भर्ती करने का प्रस्ताव है, जिसका विवरण निम्नवत है:

The Indian Institute of Tropical Meteorology (IITM) is an autonomous research organization fully funded by Ministry of Earth Sciences, New Delhi. It is a premier Institute of national and international repute, devoted to research in various aspects of atmospheric sciences with emphasis on tropical meteorology, particularly on the Climate Change and Indian Monsoon.

It is proposed to recruit for the following posts under various projects at IITM as detailed below:

क्रम सं. Sr. No.	पद का नाम / Name of the post	परिलब्धियाँ Emoluments	कुल पद Total Posts	अधिकतम आयु Max. Age
1.	कार्यकारी निदेशक / Executive Director	₹./Rs.1,31,100/- + मकान किराया भत्ता / HRA	01	50 वर्ष / 50 years
2.	परियोजना वैज्ञानिक ई / Project Scientist E	₹./Rs.1,23,100/- + मकान किराया भत्ता / HRA	04	50 वर्ष / 50 years
3.	परियोजना वैज्ञानिक डी /Project Scientist D	₹./Rs. 78,000/- + मकान किराया भत्ता / HRA	11	45 वर्ष / 45 years
4.	परियोजना वैज्ञानिक सी /Project Scientist C	₹./Rs. 67,000/- + मकान किराया भत्ता / HRA	13	40 वर्ष / 40 years
5.	परियोजना वैज्ञानिक बी /Project Scientist B [एससी-2, एसटी-2 एवं ईडब्ल्यूएस-2 / For SC-2, ST-2 & आ EWS-2]	₹./Rs. 56,000/- + मकान किराया भत्ता / HRA	06	35 वर्ष / 35 years
6.	कम्प्यूटर एप्लीकेशन सहयोग वैज्ञानिक Computer Application Support Scientist	Rs.75,000/- (समेकित वेतन / consolidated salary)	01	28 वर्ष / 28 years

प्रारंभ में नियुक्ति पूर्णतया अस्थायी रूप से अनुबंध के आधार पर दिनांक 31 दिसंबर 2020 तक की अवधि या परियोजना पूर्ण होने तक, जो भी पहले हो। कार्यकाल का विस्तार परियोजना अवधि और संतोषजनक निष्पादन के अधीन है।

The appointment is purely on temporary on contractual basis initially for a period upto **31<sup>st</sup> December 2020** or completion of project whichever is earlier. Extension of tenure is coterminous with the project period and subject to the satisfactory performance.

भारत सरकार के मानदंडों के अनुसार एससी / एसटी, ओबीसी, शारीरिक विकलांग / भूतपूर्व सैनिकों के लिए ऊपरी आयु सीमा में छूट दी गई है।

Upper age limit is relaxed for SC/ST, OBC, Physical handicapped/ Ex-servicemen as per Government of India norms.

इच्छुक उम्मीदवार अपने सीवी के साथ केवल ऑनलाइन आवेदन <http://www.tropmet.res.in/Careers> पर कर सकते हैं।

Aspiring candidates may submit their applications along with their CV online only: <http://www.tropmet.res.in/Careers>

आवेदनों की हार्ड कॉपी स्वीकार नहीं की जाएगी।

Hard copy of the applications will not be accepted.

पदों के बारे में अन्य संबंधित विवरण [www.tropmet.res.in/Careers](http://www.tropmet.res.in/Careers) पर उपलब्ध हैं।

Other relevant details about the posts are available under [www.tropmet.res.in/Careers](http://www.tropmet.res.in/Careers)

ऑनलाइन आवेदन जमा करने की सुविधा दिनांक 3 मार्च, 2020 (17:00 बजे) से शुरू होगी और 29 मार्च, 2020 (17.00 बजे) को बंद होगी।

Facility for submitting online applications will commence on 3<sup>rd</sup> March, 2020 (17:00 hours) and close on 29<sup>th</sup> March, 2020 (17.00 hrs).

## **INSTRUCTIONS**

1. The last date of submission of online application is **29.03.2020**. The last date is the cut off date for all purposes including age/qualification/experience etc.
2. Only Indian Nationals are eligible to apply.
3. Mere possession of required qualification will not entitle the candidates to be selected for interview. If the number of applications received in response to advertisement is large, it will not be convenient or possible for the selection Board to interview or conduct written test for all those candidates. So, the centre may restrict the number of candidates to be called for interview/ written test to a reasonable limit of desirable qualification and/or on the record of academic performance and/or relevant experience for the post prescribed in the advertisement as per the specific requirement of the centre and/or any other benchmark decided by a committee constituted to screen the applications. No correspondence will be entertained with candidates who are not called for Interview/written examination.
4. Experience shall mean the experience in the relevant field acquired from Government/ Semi Govt. / PSU/ Autonomous/ Research/ Reputed Organization after obtaining the minimum educational qualification asked for in the said category. Experience claim should be supported by valid documentation.
5. The selection will be on the basis of performance of the screened in candidates, in the interview.
6. Candidates must produce all original documents as proof of details furnished in the application and photocopy of each, at the time of interview for verification. Any discrepancies found in the certificate will attract the disqualification of applications. Non production of the original certificates at the time of interview/ written test will also make the candidate disqualified.
7. Selected candidate may have to join the post immediately, on being found fit by Medical Authority.
8. Essential qualification, experience and age limit can be relaxed at the discretion of the appointing authority in exceptional cases.

9. Director, IITM reserves the right to fill-up or not to fill up the post advertised without assigning any reasons thereof.
10. Doctorate Degree will count as 3 years of experience
11. M.Tech. degree will be counted as 1 year experience
12. No TA/DA will be paid for attending the interview/written examination. For SC/ST candidates admissible TA/DA shall be considered as per Government of India orders.
13. CGPA grading is to be converted in the percentage.
14. Total number of posts may vary.

<p><b>Post Code-HPC-2020-001</b>  <b>Post Name – Project Scientist-E (For High Performance Computing Program) No. of posts - 02.</b></p> <p><b>Essential qualification:</b></p> <ul style="list-style-type: none"> <li>• Master’s degree in Physics / Mathematics / Oceanography / Atmospheric Sciences / Meteorology / Computer Applications / Computer Engineering / Computer Technology / Computer Science / Information Technology with at least 60% (or equivalent CGPA) from recognized University / Institute.</li> </ul> <p style="text-align: center;"><b>or</b></p> <p>Bachelor’s degree in Engineering or Technology in Computer Applications / Computer Engineering / Computer Technology / Computer Science / Information Technology/Electronics and Telecommunication/Mechatronics/Mechanical Engineering with at least 60% marks from recognized University / Institute.</p> <ul style="list-style-type: none"> <li>• Minimum 11 years of working experience in High performance computational and associated relevant field.</li> </ul>
<p><b>Desirable Qualification</b></p> <ul style="list-style-type: none"> <li>• Ph.D. in the above subjects would be a desirable qualification.</li> <li>• Experience in application of Machine Learning and Artificial Intelligence is desirable.</li> <li>• Working experience in parallel numerical methods and algorithms, discretization of differential equations and domain decomposition is an added advantage.</li> <li>• Experience in model development is desirable.</li> <li>• Good experience of GPU programming (GPU + CPU) is desirable.</li> <li>• Experience in any of Coupled Ocean-Atmospheric Models, Earth System Models, Climate Data Analysis, Cloud Physics, Cloud-Aerosol interaction observations and modeling, Asian Monsoons, Hydrological modeling and Data Assimilation.</li> <li>• Strong experience in Earth System Modeling</li> <li>• Experience in using Programming languages (such as FORTRAN-90, IDL, NCL, CDO, C/C++ etc.)</li> <li>• Strong command in Parallel programming</li> <li>• Handling of large volume of satellite data like Net CDF, HDF, GRIB etc.</li> <li>• Deployment and Management of HPC and its associated components.</li> </ul>
<p><b>Job Responsibilities</b></p> <p>Selected candidates are expected to</p> <ul style="list-style-type: none"> <li>• Work toward Research &amp; Development activities in the area related to HPC.</li> <li>• Machine learning and Artificial Intelligence.</li> <li>• Management activities of HPC system at MoES.</li> </ul>

<p><b>Post Code - HPC-2020-002</b>  <b>Post Name - Project Scientist – D (For High Performance Computing Program) No. of posts - 05.</b></p>
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**Essential Qualification:**

- Master's degree in Physics / Mathematics/Oceanography / Atmospheric Sciences / Meteorology / Seismology / Computer Applications / Computer Engineering / Computer Technology / Computer Science / Information Technology with at least 60% (or equivalent CGPA) from recognized University / Institute.

**or**

Bachelor's degree in Engineering or Technology in Computer Applications / Computer Engineering / Computer Technology / Computer Science / Information Technology/Electronics and Telecommunication/Mechatronics/Mechanical Engineering with at least 60% marks from recognized University / Institute.

- Minimum 7 years of working experience in High Performance Computing Systems, technologies and its related software's/ applications.

**Desirable Qualification:**

- Experience in development of system software's, tools and applications used in high performance computing environment would be desirable.
- Proven Experience and certifications in HPC Systems platforms like parallel file system, job scheduler, HSM, linux cluster-environments and managements tools is desirable.
- Experience in Python along with libraries like Tensorflow, Pytorch etc.
- Experience in GPU programming.
- Experience in using Programming languages (like FORTRAN-90, C/C++ etc.), Shell scripting; Meteorological data analysis tools (like GrADS, FERRET, NCL, NCO, CDO etc.)
- Handling of large volume of data and conversant with data format like NetCDF, HDF, GRIB etc.
- Proven experience in application of Machine Learning and Artificial Intelligence is highly desirable.
- Working experience in parallel numerical methods and algorithms, discretization of differential equations and domain decomposition is an added advantage.
- Experience in model development is desirable.
- Ability to work in large groups.
- Knowledge of HPC Systems Administration would be an added advantage.

**Job Responsibilities:**

The selected candidate will be responsible to work in Maintenance, development and troubleshooting of HPC systems and its associated applications related issues of earth science system including AI/ML models.

<p><b>Post Code - HPC-2020-003</b>  <b>Post Name - Project Scientist – B (For High Performance Computing Program) No. of posts - 01.</b></p>
<p><b>Essential Qualification:</b></p> <ul style="list-style-type: none"> <li>• Master’s degree in Physics / Mathematics/ Oceanography / Atmospheric Sciences / Meteorology / Seismology / Computer Applications / Computer Engineering / Computer Technology / Computer Science / Information Technology with at least 60% (or equivalent CGPA)from recognized University / Institute.</li> </ul> <p style="text-align: center;"><b>or</b></p> <ul style="list-style-type: none"> <li>• Bachelor’s degree in Engineering or Technology in Computer Applications / Computer Engineering / Computer Technology / Computer Science / Information Technology/Electronics and Telecommunication/Mechatronics/Mechanical Engineering with at least 60% marks from recognized University / Institute.</li> </ul>
<p><b>Desirable Qualification:</b></p> <ul style="list-style-type: none"> <li>• A minimum of 02 years of Post qualification working experience in High Performance Computing Systems, technologies and its related software's/ applications.</li> <li>• Experience is development of system software's, tools and applications used in high performance computing environment would be desirable.</li> <li>• Experience in system and servers administration particularly in linux environment.</li> <li>• Experience is management of system/servers software various tools and applications.</li> <li>• Proven Experience and certifications particularly in linux, networking, storage, cluster-environments and managements tools is desirable.</li> <li>• Ability to work in large groups.</li> <li>• Good experience in Python.</li> <li>• Experience in machine learning is desirable</li> <li>• Experience in using Programming languages (like FORTRAN-90, C/C++ etc.), Shell scripting;</li> <li>• Meteorological data analysis tools (like GrADS, FERRET, NCL, NCO, CDO etc.)</li> <li>• Knowledge of HPC Systems Administration would be an added advantage</li> </ul>
<p><b>Job Responsibilities:</b>  To work in development and support of various HPC related issues.</p>

<p><b>Post Code - NFAR- 2020-001</b>  <b>Post Name - Project Scientist –B (For NFAR) No. of posts – 02.</b></p>
<p><b>Essential Qualification:</b></p> <ul style="list-style-type: none"> <li>• Master’s Degree with at least 60% of marks in Physics/ Atmospheric Sciences/Meteorology/ from a recognized university/institute.</li> </ul> <p style="text-align: center;"><b>or</b></p> <p>Bachelor’s degree in Engineering or Technology in the above mentioned subject with at least 60% marks from recognized University / Institute.</p>
<p><b>Desirable Qualification:</b></p> <ul style="list-style-type: none"> <li>• Research experience in aerosols, clouds, radiation and their interactions with Indian monsoons.</li> <li>• Experience in handling ground instruments such as Radiometers, Sky Imager, Solar Radiation sensors, their calibrations and retrieval techniques for aerosol and cloud properties.</li> <li>• Research experience in airborne and satellite data analysis.</li> <li>• Working experience in meteorological data analysis tools (like MatLab, Python, GrADS, NCL, etc.).</li> <li>• Basic knowledge in aerosol chemistry models (like WRF-Chem).</li> <li>• Candidate should be ready to work in field campaigns anywhere in India.</li> </ul>
<p><b>Job Responsibilities:</b>  The selected candidate will take part in field campaigns, responsible for processing and analysis of Ground-based, Satellite and Airborne data and model outputs, also development of retrieval algorithms/codes.</p>

<p><b>Post Code - NMM-2020-001</b>  <b>Post Name - Project Scientist – D (For MM- II Project)</b></p>
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<b>No. of posts – 02 ( 01 post – For Model development &amp; Parameterization 01 post – For Application Development for Agriculture)</b>
<b>Essential Qualification:</b> <ul style="list-style-type: none"> <li>• Master’s degree in Meteorology/ Oceanography / Geophysics (Meteorology) / Atmospheric Sciences /Physics/ Mathematics/Agriculture with at least 60% (or equivalent CGPA) from recognized University / Institute.</li> </ul> <p style="text-align: center;"><b>or</b></p> <ul style="list-style-type: none"> <li>• Bachelor’s degree in Engineering or Technology in the above mentioned subject with at least 60% marks from recognized University / Institute.</li> <li>• Minimum 7 years of experience in Research and Development in the relevant field.</li> </ul>
<b>Desirable Qualification:</b> <ul style="list-style-type: none"> <li>• Ph.D. in the above subjects would be a desirable qualification.</li> <li>• Working knowledge of Atmospheric, Oceanic and Coupled General Circulation Models and issues related to porting, installation and troubleshooting of dynamical models in HPC. The experience should be demonstrated through scientific reports/ publications.</li> <li>• Knowledge of parallel computing and porting general circulation models on the high performance computer architectures.</li> <li>• Experience in using Programming languages (like FORTRAN-90, C/C++ etc.), Shell scripting is needed. Ability to write and prepare model code using programe language and shell scripts.</li> <li>• Meteorological data analysis tools (like GrADS, FERRET, NCL, NCO, CDO etc.)</li> <li>• Handling of large volume of data and conversant with data format like NetCDF, HDF, GRIB, GrADS etc.</li> <li>• Ability to work in large groups.</li> <li>• Knowledge of UNIX/LINUX Systems Administration would be an added advantage.</li> <li>• Good written and oral communication skills.</li> </ul>
<b>Job Responsibilities:</b> <p>The selected candidate will be responsible for handling the model codes, its debugging, parameterization of process in the coupled models etc. for prediction purpose.</p> <p>The selected candidate will be responsible for developing climate applications in the field of agriculture using short range to long range forecast including sub seasonal forecast from coupled models.</p>

<b>Post Code – NMM-2020-002</b>
<b>Post Name - Project Scientist –C (For Model Diagnostics) No. of posts - 01.</b>
<b>Essential Qualification:</b> <ul style="list-style-type: none"> <li>• Master’s degree in Electronics/ Physics/ Mathematics/ Meteorology/ Oceanography /Atmospheric Sciences or equivalent with at least 60% marks from recognized University / Institute.</li> </ul> <p style="text-align: center;"><b>or</b></p> <ul style="list-style-type: none"> <li>• Bachelor’s degree in Engineering or Technology in the above mentioned subject with at least 60% marks from recognized University / Institute.</li> <li>• Minimum 3 years of experience in Research and Development in the relevant field.</li> </ul>
<b>Desirable Qualification:</b> <ul style="list-style-type: none"> <li>• Ph.D. in any of the above subjects would be a desirable qualification.</li> <li>• A good knowledge in climate system and coupled models for prediction. The experience should be demonstrated through scientific reports/publications.</li> <li>• Experience in using Programming languages (like FORTRAN-90, C/C++ etc.), Shell scripting and meteorological data analysis tools like (like GrADS, FERRET, NCL, NCO, CDO etc.)</li> <li>• Handling of large volume of data and conversant with data format like NetCDF, HDF, GRIB, GrADS etc.</li> <li>• Ability to work with large groups.</li> <li>• Knowledge of UNIX/LINUX System Administration would be an added advantage. Good written and oral communication skills.</li> </ul>
<b>Job Responsibilities:</b> <p>The selected candidate will be responsible for analyzing the model outputs and diagnosing the errors and model performances.</p>

<b>Post Code – NMM- 2020-003</b>
<b>Post Name - Computer Application Supporting Scientist (For MM- II Project) No. of posts - 01</b>

**Essential Qualification:**

- Master's degree in computer applications (MCA)/ B.E./ B. Tech (computer Science)/IT with at least 60% marks from recognized University / Institute.
- A minimum of 3 year in field of IT/Computer/Science and similar field
- Adequate knowledge of webpage designing, data uploading, porting software etc.

**Desirable Qualification:**

- Working knowledge in Atmospheric, Oceanic and coupled general circulation models and issue related to porting, installation and troubleshooting of dynamical models in HPC.
- Experience in using programming languages (like FORTRAN-90, C/C++ etc); Shell scripting is needed. Ability to write and prepare model code using program language and shell scripts.
- Knowledge of parallel computing and porting general circulation models on the high performance computer architectures.
- Handling of large volume of data and conversant with data format like NetCDF, HDF, GRIB, GrADS etc.
- Ability to work in large groups.
- Knowledge of UNIX/LINUX System Administration would be an added advantage.

**Job Responsibilities:**

The selected candidate will be responsible for development of webpage for monsoon mission and supporting to dismantle the applications developed by the mission

**Post Code – CAIPEEX-2020 -001****Post Name - Project Scientist –B (For CAIPEEX) for radar operations No. of posts – 01.****Essential Qualification:**

- Masters Degree with at least 60% of marks in Physics/ Atmospheric Sciences from a recognized university/institute.

**or**

Bachelor's degree in Engineering or Technology in Electronics / Electronics and Telecommunication with at least 60% marks from recognized University / Institute.

**Desirable Qualification:**

BE/BTech /Masters degree with minimum 2 years' experience for meteorological field campaign /radar meteorological data and operation of radar, especially experience with dual polarimetric radar observations. Demonstrated experience with radar operations, TITAN or other product development and analysis tools, etc.

**Job Responsibilities:**

Radar Engineer (Electronics and instrumentation) to operate and maintain the C-band radar onsite in Solapur and ensure continuous operation and also involve in radar data analysis and generating radar products. In addition, the selected candidate is required to participate in field campaign, Contribute to the radar calibration, data collection, upkeep and analysis of data.

<p><b>Post Code - CAIPEEX-2020 -002</b>  <b>Post Name - Project Scientist -B (For CAIPEEX) for Aerosol observational studies for aerosol-cloud interaction studies No. of posts - 01.</b></p>
<p><b>Essential Qualification:</b></p> <ul style="list-style-type: none"> <li>• Masters Degree with at least 60% of marks in Physics/ Chemistry/ Atmospheric Sciences/Meteorology/ from a recognized university/institute.</li> </ul> <p style="text-align: center;"><b>or</b></p> <p>Bachelor's degree in Engineering or Technology in Electronics / Electronics and Telecommunication with at least 60% marks from recognized University / Institute.</p>
<p><b>Desirable Qualification:</b>  Minimum 2 years' experience in aerosol physical and chemical characterization studies in combination with other observations.</p>
<p><b>Job Responsibilities:</b>  Participate in field campaign and contribute to the data collection, calibration, upkeep and analysis of data.</p>

<p><b>Post Code - CAIPEEX-2020 -003</b>  <b>Post Name - Project Scientist -B (For CAIPEEX) for Aircraft data analysis to support development of the cloud seeding protocol using explicit modelling techniques No. of posts - 01.</b></p>
<p><b>Essential Qualification:</b></p> <ul style="list-style-type: none"> <li>• Masters Degree with at least 60% of marks in Physics/ Chemistry/ Atmospheric Sciences/Meteorology/ from a recognized university/institute.</li> </ul> <p style="text-align: center;"><b>or</b></p> <p>Bachelor's degree in Engineering or Technology in Electronics / Electronics and Telecommunication with at least 60% marks from recognized University / Institute.</p>
<p><b>Desirable Qualification:</b>  Minimum 2 years' experience, knowledge of cloud microphysics for analysing cloud physics observations from airborne campaigns.  Numerical modelling experience with explicit simulations such as bin microphysics will be advantageous.</p>
<p><b>Job Responsibilities:</b>  To carry out analysis of aircraft data, in combination with radar observations and explicit simulations to derive protocols for weather modification aspects.  Participate in field campaign and contribute to the data collection, calibration, upkeep and analysis of data, as per requirement.</p>



<p><b>Post Code- DESK-2020-001</b>  <b>Post Name – Project Scientist-C (1 post) for Decadal Climate Variability and Predictability</b></p>
<p><b>Essential Qualification</b></p> <ul style="list-style-type: none"> <li>• A Master’s degree or equivalent in Atmospheric Sciences/Meteorology/Oceanography/Physics/Mathematics/Geophysics with Meteorology as Specialization/Earth System Sciences from a recognized university/institution with at least 60% marks at Post Graduation</li> </ul> <p style="text-align: center;"><b>OR</b></p> <p>Bachelor’s degree in Engineering or Technology with minimum 60% marks from a recognized university or equivalent</p> <ul style="list-style-type: none"> <li>• A minimum of 3 years of experience in Research and Development in any of the following such as coupled ocean-atmospheric modeling, ocean modeling, atmospheric modeling, sea ice modeling, climate data analysis and interpretation as evidenced by publications.</li> </ul>
<p><b>Desirable qualification</b></p> <ul style="list-style-type: none"> <li>• Teaching Experience in relevant field of ocean/atmospheric sciences</li> <li>• PhD in Atmospheric/Meteorology/Oceanography or equivalent</li> <li>• M.Tech in Atmospheric Sciences or Physical Oceanography</li> <li>• Good track record of peer reviewed publications in high impact journals</li> <li>• Working knowledge in Coupled Ocean-Atmospheric Models (CGCMs), OGCMs, AGCMs etc.</li> <li>• Experience in programming language (such as FORTRAN, MATLAB, CDO, NCL etc.)</li> <li>• Handling large volume of data and conversant with data format like NetCDF, HDF, GRIB etc.</li> </ul>
<p><b>Job responsibility</b></p> <ul style="list-style-type: none"> <li>• Selected candidates are expected to engage in teaching activities of Training program under DESK in addition to the R&amp;D in relevant scientific groups in line with the essential qualifications mentioned.</li> </ul>

<p><b>Post Code- DESK-2020-002</b>  <b>Post Name – Project Scientist-C (1 post) for Short Term Climate Variability, Predictability and Applications</b></p>
<p><b>Essential Qualification</b></p> <ul style="list-style-type: none"> <li>• Master’s Degree or equivalent in (Physics/Atmospheric Sciences/Meteorology/RS-GIS/Statistics/Computer Applications/Applied Mathematics) from recognized University/Institution with at least 60% marks</li> </ul> <p style="text-align: center;"><b>OR</b></p> <p>Bachelor’s degree in Engineering or Technology with minimum 60% marks from a recognized university or equivalent</p> <ul style="list-style-type: none"> <li>• A minimum three years’ experience in Research and Development in the field of climate variability and teleconnections, Monsoon research; analysis of climate model outputs etc as evidenced by published research</li> </ul>
<p><b>Desirable Qualifications:</b></p> <ul style="list-style-type: none"> <li>• M.Tech (Atmospheric Science/Climate Science) with 60% marks or Ph.D. in Atmospheric Science / Statistics.</li> <li>• Research Experience supported by publications in good impact journals would be an added advantage.</li> <li>• Knowledge of operating systems like LINUX and WINDOWS, Expertise in R &amp;/ PYTHON and analysis and visualization softwares like xmgrace, GrADS, MATLAB, CDO, NCL etc ,</li> <li>• Experience in handling large volume of climate model outputs ; data formats like NETCDF, HDF and meteorological data , Knowledge of simple statistical tools.</li> </ul>
<p><b>Job Responsibilities</b></p> <ul style="list-style-type: none"> <li>• Analysis of observed data and model outputs ; Extraction and analysis of high resolution regional climate models , statistical downscaling</li> <li>• Selected candidates are expected to engage in teaching activities of Training program under DESK in addition to the R&amp;D in relevant scientific groups in line with the essential qualifications mentioned.</li> </ul>

<p><b>Post Code- DESK-2020-003</b>  <b>Post Name – Project Scientist-C (1 post) for Ocean Biogeochemistry and Carbon Cycle modeling and analysis.</b></p>
<p><b>Essential Qualification</b></p> <ul style="list-style-type: none"> <li>• A Master’s degree or equivalent in Atmospheric Sciences/Meteorology/Oceanography/Physics/Mathematics/Geophysics with Meteorology as Specialization/Earth System Sciences from a recognized university/institution with at least 60% marks at Post Graduation</li> </ul> <p style="text-align: center;"><b>OR</b></p> <p>Bachelor’s degree in Engineering or Technology with minimum 60% marks from a recognized university or equivalent</p> <ul style="list-style-type: none"> <li>• A minimum of 3 years of experience in Research and Development in ocean-biogeochemistry modeling and data analysis, inverse modeling, terrestrial carbon cycle and climate data analysis-interpretation as evidenced by publications.</li> </ul>
<p><b>Desirable qualification</b></p> <ul style="list-style-type: none"> <li>• Teaching Experience in relevant field of ocean/atmospheric sciences</li> <li>• PhD in Atmospheric/Meteorology/Oceanography or equivalent</li> <li>• M.Tech in Atmospheric Sciences or Physical Oceanography</li> <li>• Good track record of peer reviewed publications in high impact journals</li> <li>• Working knowledge in Biogeochemistry Ocean Models, Terrestrial Biospheric Carbon Cycle models</li> <li>• Experience in programming language (such as FORTRAN, MATLAB, CDO, NCL etc.)</li> <li>• Handling large volume of data and conversant with data format like NetCDF, HDF, GRIB etc.</li> </ul>
<p><b>Job responsibility</b></p> <ul style="list-style-type: none"> <li>• Selected candidates are expected to engage in teaching activities of Training program under DESK in addition to the R&amp;D in relevant scientific groups in line with the essential qualifications mentioned.</li> </ul>

<p><b>Post Code- DESK-2020-004</b>  <b>Post Name – Project Scientist-D (2 posts)</b></p>
<p><b>Essential qualification:</b></p> <ul style="list-style-type: none"> <li>• A Master’s degree or equivalent in Atmospheric Sciences/Meteorology/Oceanography/Physics/Mathematics/Geophysics with Meteorology as Specialization/Earth System Sciences from a recognized university/institution with at least 60% marks at Post Graduation</li> </ul> <p style="text-align: center;"><b>OR</b></p> <p>Bachelor’s degree in Engineering or Technology with minimum 60% marks from a recognized university or equivalent</p> <ul style="list-style-type: none"> <li>• Minimum 7 year experience in Research and Development in Atmospheric/Oceanic/Earth System Sciences relevant to observations/modeling/climate data analysis/weather and climate policy</li> </ul>
<p><b>Desirable Qualification</b></p> <ul style="list-style-type: none"> <li>• M.Tech in Atmospheric Sciences/Climate Science/Earth System Science and Technology with at least 60% marks from recognized university/Institute.</li> <li>• 7 years experience after Master’s degree</li> <li>• Proven experience in teaching at Master’s level in the fields/subjects mentioned in the essential qualifications.</li> <li>• Good track record of peer reviewed publications in high impact journals</li> <li>• Experience in Coupled Ocean-Atmospheric Models, Earth System Models</li> <li>• Experience in Climate Data Analysis</li> <li>• Experience in Cloud Physics, Cloud-Aerosol interaction observations and modeling</li> <li>• Experience in Asian Monsoons, Hydrological modeling and Data Assimilation</li> <li>• Experience in Weather and climate risk assessments, weather and climate impact assessment, experience in dissemination of policy relevant climate information</li> </ul>

- Experience in using Programming languages (such as FORTRAN-90, IDL, NCL, CDO, C/C++ etc.)
- Strong command in Parallel programming
- Handling of large volume of satellite data like Net CDF, HDF, GRIB etc.

**Job Responsibilities**

- Selected candidates are expected to engage in teaching activities of Training program under DESK in addition to the R&D in relevant scientific group in line with the essential qualifications mentioned.

**Post Code- DESK-2020-005**

**Post Name – Project Scientist-E (2 posts)**

**Essential qualification:**

- A Master’s degree or equivalent in Atmospheric Sciences/Meteorology/Oceanography/Physics/Mathematics/Geophysics with Meteorology as Specialization/Earth System Sciences from a recognized university/institution with at least 60% marks at Post Graduation OR M.Tech in Atmospheric Sciences/Climate Science/Earth System Science and Technology with at least 60% marks from recognized university/Institute
- Minimum 11 year experience (11 years after Master’s degree ) in Atmospheric/Oceanic/Earth System Sciences relevant to modeling and climate data analysis

**Desirable Qualification**

- PhD in Atmospheric/Oceanic/Meteorology/Earth System Sciences from a recognized university/Institute.
- Proven experience in teaching at Master’s level in the fields/subjects mentioned in the essential qualifications as well as guiding students at M.Sc/M.Tech levels.
- Experience in any of Coupled Ocean-Atmospheric Models, Earth System Models, Climate Data Analysis, Cloud Physics, Cloud-Aerosol interaction observations and modeling, Asian Monsoons, Hydrological modeling and Data Assimilation.
- Strong experience in Earth System Modeling
- Experience in using Programming languages (such as FORTRAN-90, IDL, NCL, CDO, C/C++ etc.)
- Strong command in Parallel programming
- Handling of large volume of satellite data like Net CDF, HDF, GRIB etc.

**Job Responsibilities**

- Selected candidates are expected to engage in teaching activities of Training program under DESK in addition to the R&D in relevant scientific group in line with the essential qualifications mentioned.

**Post Code- DESK-2020-006**

**Post Name – Executive Director (1 post) (on Contract)**

**Essential qualification:**

- A Master’s degree or equivalent in Atmospheric Sciences/Meteorology/Oceanography/Physics/Mathematics/Geophysics with Meteorology as Specialization/Earth System Sciences from a recognized university/institution with at least 60% marks at Post Graduation OR M.Tech in Atmospheric Sciences/Climate Science/Earth System Science and Technology with at least 60% marks from recognized university/Institute
- PhD in Atmospheric/Oceanic/Meteorology/Earth System Sciences from a recognized university/Institute.
- Minimum 16 year experience (16 years after Master’s degree in which 9 years after PhD) in teaching (at graduation or post graduation level), research and development, administration, planning supervision or training etc. in the specified field.

**Desirable Qualification**

- Proven experience in teaching at Master’s level in the fields/subjects mentioned in the essential qualifications as well as guiding students at M.Sc/M.Tech/PhD levels.
- Experience in policy making, planning or management etc. related to Atmospheric/Oceanic/Earth Sciences.

**Job Responsibilities**

- Selected candidate is expected to engage in coordinating the teaching and training activities of DESK program.

**Post Code - ART-CI-2020-001****Post Name - Project Scientist D (For ART-CI Project ) Posting at Silkheda, Sehore (50 km from Bhopal) No. of posts - 01****Essential Qualification:**

- Master's degree in Meteorology/ Atmospheric Sciences /Physics/ Electronics with at least 60% (or equivalent CGPA) from recognized University / Institute.

**or**

Bachelor's degree in Engineering or Technology in Electronics/ Electronics and Telecommunication, Instrumentation with at least 60% marks from recognized University / Institute.

- Minimum 7 years of experience in Research and Development in radar technology or radar remote sensing and its applications to atmospheric studies as evidenced by publications in the above field.

**Desirable Qualification:**

- Demonstrated experience in operation, maintenance, calibration and troubleshoot of Doppler weather radars / wind profilers and its utilization in atmospheric studies.
- Experience in radar signal processing, development of radar modules
- Ph.D. in the above subjects mentioned in essential qualification would be desirable.
- Experience in handling voluminous radar data sets and different data formats

**Job Responsibilities:**

- To manage remote sensing facilities radars, wind profiler.
- Also to conduct/manage observational campaigns to study clouds, convection and precipitation using atmospheric remote sensing facilities. This will involve setup, calibrate, maintain Doppler weather radars and wind profilers.

**Post Code - ART-CI-2020-002****Post Name - Project Scientist D (For ART-CI Project ) Posting at Silkheda, Sehore (50 km from Bhopal) No. of posts - 01****Essential Qualification:**

- Master's degree in Meteorology/ Atmospheric Sciences /Physics/ Electronics with at least 60% (or equivalent CGPA) from recognized University / Institute.

**or**

Bachelor's degree in Engineering or Technology in Electronics/ Electronics and Telecommunication, Instrumentation with at least 60% marks from recognized University / Institute.

- Minimum 7 years of experience in Research and Development in the field of Atmospheric Instrumentation and measurements relevant to aerosols, radiation, boundary layer and precipitation as evidenced by publications in the above field.

**Desirable Qualification:**

- Demonstrated experience in operation, maintenance and calibration of measurement systems relevant to Atmospheric Instrumentation (relevant to aerosols, radiation, boundary layer and precipitation)
- Experience in participation in observational campaigns, data quality control with relevant publications
- PhD in the above subjects mentioned in essential qualification would be desirable.

**Job Responsibilities:**

- To manage in-situ observing systems (aerosol, radiation, precipitation, land surface-atmosphere interaction measurement facilities)
- Also to conduct/manage observational campaigns to study aerosol, radiation, precipitation and

land-atmosphere interaction processes over testbed site using in-situ and remote sensing instruments. This will involve setup, calibrate, maintain various instruments and measurement facilities relevant to above topics.

**Post Code - ART-CI- 2020-003**

**Post Name - Project Scientist C (For ART-CI Project ) Posting at Silkheda, Sehore Dist (50 km from Bhopal) No. of posts - 04**

**Essential Qualification:**

- Master's degree in Meteorology/Atmospheric Sciences/Physics/ Electronics with at least 60% (or equivalent CGPA) from recognized University / Institute.

**or**

Bachelor's degree in Engineering or Technology in Electronics/ Electronics and Telecommunication, Instrumentation with at least 60% marks from recognized University / Institute.

- Minimum 3 years of experience in Research and Development in i) radar technology or radar remote sensing and its applications to atmospheric studies as evidenced by publications in the above field.

**Desirable Qualification:**

- Demonstrated experience in operation, maintenance, calibration and troubleshoot of Doppler weather radars / wind profilers and its utilization in atmospheric studies
- Experience in handling voluminous radar data sets and different data formats
- Experience in radar signal processing, development of radar modules
- Work experience with various operating systems such as Unix, Linux etc.

**Job Responsibilities:**

- Radar operation, maintenance, calibration and troubleshooting, data quality control, archival of data
- Wind profilers operation, maintenance, calibration and troubleshooting, data quality control, archival of data
- To conduct observational campaigns to study convection, clouds and precipitation in the site using remote sensing facilities such as Doppler weather radars and wind profilers. This will involve setup, calibrate, maintain radars and wind profilers.

**Post Code - ART-CI- 2020-004**

**Post Name - Project Scientist C (For ART-CI Project ) Posting at Silkheda, Sehore Dist (50 km from Bhopal) No. of posts - 03**

**Essential Qualification:**

- Master's degree in Meteorology/Atmospheric Sciences/Physics/Electronics with at least 60% (or equivalent CGPA) from recognized University / Institute.

**or**

Bachelor's degree in Engineering or Technology in Electronics/ Electronics and Telecommunication, Instrumentation with at least 60% marks from recognized University / Institute.

- Minimum 3 years of experience in Research and Development in i) measurement systems relevant to aerosol (SMPS, APS, CCN, ACSM, AMS, carbonaceous aerosol and aerosol/gaseous chemistry), radiation, precipitation (disdrometer, MRR), land-surface parameters as evidenced by publications in the above field

**Desirable Qualification:**

- Demonstrated experience on aerosol instrumentation (SMPS, APS, CCN, ACSM/AMS), radiation sensors, Precipitation instruments (Disdrometers, MRR, 2DVD), boundary layer measurements (eddy covariance sensors, GHG measurements)
- Work experience with various operating systems such as Unix, Linux etc.

<p><b>Job Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Aerosol observing system operation / maintenance, calibration, data quality control, archival of data</li> <li>• Radiation and boundary layer observing system operation and maintenance, data quality control, archival of data</li> <li>• Raingauge/ disdrometer operation, maintenance, data quality control, archival of data</li> <li>• To conduct observational campaigns to study aerosol, precipitation, land-atmosphere interaction in the site using in-situ and remote sensing instruments. This will involve setup, calibrate and maintain various instruments and measurement facilities.</li> </ul>
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<p><b>Post Code - ART-CI-2020-005</b>  <b>Post Name - Project Scientist C (For ART-CI Project ) Posting at Silkheda, Sehore Dist (50 km from Bhopal) No. of posts - 01</b></p>
<p><b>Essential Qualification:</b></p> <ul style="list-style-type: none"> <li>• Master's degree in Atmospheric Sciences/Chemistry/ Earth and Environmental Sciences with at least 60% (or equivalent CGPA) from recognized University / Institute.</li> </ul> <p style="text-align: center;"><b>or</b></p> <p>Bachelor's degree in Engineering or Technology in Electronics/Electronics and Telecommunication, Instrumentation with at least 60% marks from recognized University / Institute.</p> <ul style="list-style-type: none"> <li>• A minimum of 3 years research experience in the field of Atmospheric chemistry Instrumentation such as ACSM, AMS, Ion Chromotography, GC/MS etc as evidenced by publications in the above field.</li> </ul>
<p><b>Desirable Qualification:</b></p> <ul style="list-style-type: none"> <li>• Research Experience supported by publications in good impact journals would be an added advantage.</li> <li>• Working knowledge of Atmospheric Chemistry instrumentation (IC, GC/MS, AMS, PTRMS etc)</li> </ul>
<p><b>Job Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• The selected candidate has to work on to conduct observational campaigns to understand atmospheric chemistry using in-situ instruments. This will involve setup, calibrate, maintain various instruments aethalometer, EC/OC analyser, Aerosol Chemical Speciation Monitor etc.</li> </ul>

<p><b>Post Code - HACPL-2020-001</b>  <b>Post Name - Project Scientist C (For HACPL Project ) ( For HACPL at Mahabaleshwar to be posted at Mahabaleshwar) No. of posts - 01</b></p>
<p><b>Essential Qualification:</b></p> <ul style="list-style-type: none"> <li>• Master's degree in Atmospheric Sciences/Meteorology/Physics/Electronics with at least 60% (or equivalent CGPA) from recognized University / Institute.</li> </ul> <p style="text-align: center;"><b>or</b></p> <p>Bachelor's degree in Engineering or Technology in Electronics/Electronics and Telecommunication or Instrumentation with at least 60% marks from recognized University / Institute.</p> <ul style="list-style-type: none"> <li>• A minimum of 3 years research experience in the field of Atmospheric Instrumentation relevant to aerosols, clouds, boundary layer and precipitation as evidenced by publications in the above field.</li> </ul>
<p><b>Desirable Qualification:</b></p> <ul style="list-style-type: none"> <li>• Demonstrated experience on aerosol instrumentation (SMPS, APS, CCN/IN, AMS), radiation sensors, Precipitation instruments (Disdrometers)</li> <li>• Work experience with various operating systems such as Unix, Linux etc.</li> </ul>
<p><b>Job Responsibilities:</b></p> <p>The selected candidate has to work on to conduct/manage observational campaigns to study aerosol-cloud-precipitation interactions using in-situ and remote sensing instruments. This will involve setup, calibrate, maintain various aerosol instruments, cloud probes, precipitation measuring instruments.</p>